

CLAIMS

What is claimed:

1 1. An oscillating motor comprising:
2 a cylinder which can be filled with a hydraulic medium, said cylinder
3 having an inside wall with at least one rib extending radially inward;
4 a motor shaft supported in said cylinder with freedom to oscillate;
5 a sleeve concentric to said motor shaft;
6 at least one vane extending radially outward to said cylinder;
7 a pair of cylinder covers surrounding said motor shaft and forming working
8 chambers between said cylinder and said sleeve;
9 a pair of ring-shaped spaces between said motor shaft and said cylinder;
10 a pair of pressure-preloaded sealing arrangements in respective said ring-
11 shaped spaces sealing off said working chambers; and
12 an axial groove between said motor shaft and said sleeve, said axial
13 groove forming a pressure equalization channel connecting said ring-shaped spaces.

1 2. An oscillating motor as in claim 1 wherein said pressure
2 equalization channel is machined in said motor shaft.

1 3. An oscillating motor as in claim 1 wherein said pressure
2 equalization channel is formed in said sleeve.

1 4. An oscillating motor as in claim 1 further comprising a connection
2 which connects said pressure equalization channel to one of said working chambers.

1 5. An oscillating motor as in claim 4 wherein each said vane
2 comprises a sealing strip which contacts said cylinder, said connection opening against
3 said sealing strip, said sealing strip opening said connection to a working chamber as a
4 function of pressure.

1 6. An oscillating motor as in claim 3 wherein said motor shaft
2 comprises a pair of circumferential recesses which overlap respective said ring-shaped
3 spaces.

1 7. An oscillating motor as in claim 1 wherein said sleeve carries said
2 at least one vane.

1 8. An oscillating motor comprising:
2 a cylinder which can be filled with a hydraulic medium, said cylinder
3 having an inside wall with at least one rib extending radially inward;
4 a motor shaft supported in said cylinder with freedom to oscillate;
5 at least one vane extending radially outward from said shaft to said
6 cylinder;

7 a pair of cylinder covers surrounding said motor shaft and forming working
8 chambers between said cylinder and said motor shaft;

9 a pair of ring-shaped spaces between said motor shaft and said cylinder;

10 a pair of pressure-preloaded sealing arrangements in respective said ring-
11 shaped spaces sealing off said working chambers; and

12 a first axial groove in each said vane connecting said ring-shaped spaces,
13 said first axial groove receiving a sealing strip which seals off the working chamber.

1 9. An oscillating motor as in claim 8 further comprising a second axial
2 groove which adjoins said first axial groove at a shoulder in each said vane, said sealing
3 strip being supported on said shoulder.